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Beyond Fatalism

An Empirical Exploration of Self-Efficacy and Aspirations Failure in Ethiopia

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ABSTRACT

Fatalism is considered pervasive, especially in many poor communities. In this paper, we explore whether fatalistic beliefs have implications for the attitudes and behavior of poor rural households toward investment in the future. To explore the idea of fatalism, we draw inspiration from theories in psychology focusing on the role of locus of control and self-efficacy and also from the theoretical framework of aspiration failure as developed in recent economic literature. Using survey data from rural Ethiopia, we find evidence of fatalistic beliefs among a substantial group of rural households, as well as indicators consistent with narrow aspirations gap and low self-efficacy. We also find that such beliefs consistently correlate with lower demand for credit, in terms of loan size, repayment horizon, and productive purposes.

Keywords: fatalism, self-efficacy, aspirations, aspirations window, aspirations gap, aspirations failure

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1. INTRODUCTION

Fatalism is customarily, if not always formally or explicitly, attributed to Ethiopians - particularly to those who are poor.[1] The apparent intention, in such instances, is to characterize the lack of proactive and systematic effort to better their lives and the implied acceptance of their circumstances that many Ethiopians seem to display. Some researchers even go further and identify fatalism as a key factor that explains Ethiopia's rather slow socioeconomic transformation. This view certainly appears consistent with the language used by the disadvantaged to describe their lives and the difficulties thereof. For instance, Rahmato and Kidanu (1999) report use of the following expressions:

"We live only for today" portrays a life style based only on the present. There is no planning ahead or thinking about the future. It is a clear indication that people have given up on life and just don't know or don't want to think about what will happen tomorrow. It describes a state wherein people are reduced to living day-to-day with no hope for the future.

"It is a life of no thought for tomorrow" is a common expression, particularly in urban areas, indicating that whatever is found today is for today and whatever will be found tomorrow will be for tomorrow.

"Waiting to die while seated" expresses a state of being that hinges on giving up on life altogether. In the absence of alternatives, impending death is seen as a solution to the problems people are facing.

"We have neither a dream nor an imagination" is another common term used to state desperation and hopelessness. This expression reveals that people are reduced to watching others eat,

These expressions of *helplessness*, combined with claims noted at the beginning of this section, imply a need to explore systematically the nature and significance, if any, of fatalism in Ethiopia. This paper responds to that implication by addressing the following questions: Is it *feasible* or helpful to examine the nature and role of fatalism directly? Are there *concepts or constructs* that capture qualitatively the beliefs associated with fatalism but are more amenable to analysis and influence? And are there *characterizations* of qualitatively the same outcomes attributable to fatalism but are more amenable to analysis and intervention?

The paper then uses survey data from Ethiopia to uncover some evidence that indicates the presence of these beliefs and outcomes.

[1] This paper focuses on Ethiopia. This is not to suggest that fatalism is unique to, or particularly pervasive in, that country. Fatalism has been identified with many communities in the world see, for example, Elder (1966), Ingersoll (1966), Cummings (1977), and Whelan (1996) for studies in India, Thailand, USA, and Ireland, respectively.

2. PERSPECTIVES

What Is Fatalism?

There is considerable controversy regarding what fatalism is and whether it is an analytically useful concept.[2] Summarizing the various meanings linked with fatalism, Whelan (1996) states that

> "(fatalism's) potential range of meanings varies from the strict sense of a system of beliefs which holds that everything has an appointed outcome which cannot be altered by effort or foreknowledge, to a sense of resignation based on the realities of a difficult life-situation, to a more imprecise set of connotations covering cynicism towards established values of work and order."

Consider the strictest meaning: "a system of beliefs which holds that everything has an appointed outcome which cannot be altered by effort or foreknowledge." This characterization neither needs causal explanation nor allows any room for proactive behavior (individually or collectively). It is thus a dead end if the aim is to find ways of deliberately fostering change. But alternative meanings that allow less preordained outcomes (such as resignation or cynicism) are in principle explicable by *experiences* and *circumstances*. Indeed, as will be seen below, there are concepts that capture qualitatively the same beliefs or outcomes, but are linked with well- developed analytical frameworks and greater room for initiating improvement or change. These concepts are potentially more useful for understanding and influencing poverty at a deeper level. This is the route the present paper pursues with a less strict definition of fatalism – fatalism viewed as a sense of helplessness that a person may feel with regard to proactively modifying his or her future.

Perspectives from Outcomes

From an economic perspective, and to the extent that it relates to current action and its impact on future outcomes, fatalism is equivalent to not making the necessary *investments* to better one's well-being. It may thus be the case that people refrain from making investments that would enhance their well-being because they believe, in a boundedly rational way, that such investments are either infeasible or would not lead to significant changes.[3]

In fact, the phenomenon of low investment while returns to investment are or appear to be high is not unique to Ethiopia. There is indeed sufficient micro-level evidence showing that people often fail to invest even though returns are positive (and sometimes very high). For instance, in their study of farmers in southern Ghana, Goldstein and Udry (2006) find that, despite rates of real returns ranging between 250 and 300 percent in pineapple cultivation, compared to 30–50 percent in well-established food crop cultivation, only 18 percent of the land is used for pineapple growing. In Kenya, Duflo, Kremer, and Robinson (2003) report that less than 15 percent of a sample of maize farmers used fertilizers, despite rates of return greater than 100 percent. In the same region, Miguel and Kremer (2003) calculate that the pick-up rate for free de-worming pills (which were also shown to greatly improve children's health and school performance) was only 57 percent. In India, Munshi and Rozensweig (2006) show that despite rapid increases in the returns to English education during the 1990s, enrolment of boys from lower castes has not converged to the enrolment rate of boys from higher castes, while that is not true for girls. Similarly, though an additional year of education would lead to larger gains in wage income of urban residents who belong to lower quintiles of the wage distribution than those at the top of the distribution, the former spend a smaller fraction of their income on education than stimulants (Girma and Kedir

[2] The link between fate and fatalism is another aspect of the debate. For example, according to Solomon (2003) "(f)ate is not the same as fatalism, although most conceptions of the former imply the latter. Fate is the explanation. Fatalism is a doctrine." Solomon (2003) provides a critical review of the philosophical literature.

[3] This characterization also allows for the possibility that people may be unable to see where such investments lead or how they lead to where they lead or both.

(2005)). The same evidence also shows that such behavior is often even more acute among poorer populations (see Banerjee and Duflo (2003); Banerjee and Duflo (2007) for reviews). The key message is that the poor can and do make choices, and these choices may not coincide with those implied by standard economic reasoning.

A variety of mostly complementary explanations have been put forward over the years. In a class of explanations, investments do not occur – at least as much as predicted by standard economic theory – because one's expectations of privately appropriable returns are simply too low. The problem here arises primarily from the individual's environment. More specifically, limited availability of investment opportunities (such as no schools) or low access to investable resources (such as lack of credit) restrict investment. Missing or thin markets (such as credit, insurance, and labor markets) are usually responsible for such outcomes because they constrain the set of economic choices with positive expected returns. Asymmetric information, weak incentives, and difficult enforcement in turn explain these missing or thin markets.

There are also situations in which investment opportunities with positive (and potentially high) returns are not being exploited due to lack of information or knowledge about opportunities and their returns. Note that the lack of information can also be a lack of *sufficient* information. As in Yamaushi (2006), people often need to observe a wide variety of cases to make a decision.

Finally, social constraints may, independently or jointly with market failures, dampen the economic attractiveness of investment opportunities. Examples include egalitarian norms (Platteau 2000) and excessive government taxation and regulations (Hausmann, Rodrik, and Velascoy 2005). In this case, returns to individual effort are undermined by the necessity to share the benefits with other members or organizations in the community. In such cases, while adequate returns may be available, limits to private appropriation causes the apparent underinvestments.

The explanations thus far assume, not always explicitly, that the underlying logic of poor people's decision making is essentially consistent with standard economic reasoning, but respectively identified external constraints thwart them from making the corresponding *correct* choices. In contrast, a second set of explanations may be found in recent theoretical and empirical developments shifting the focus away from external constraints and toward the *manifested attributes* of decision-makers. A number of subsets can be highlighted.

Identity Issues

People's choices are conditioned by their sense of self. For example, in the experiment of Hoff and Pandey (2004) in India, the test performance of lower caste children declined when their caste status was publicly revealed at the beginning of the test. Hoff and Pandey argue that individuals readily assume caste (or more generally stereotype) roles because they expect others to treat them according to these roles. Or, as in Munshi and Rosenzweig (2005), lower caste families continue to send their sons to local language schools, whereas globalization has made English language training more rewarding.[4]

Psychological Issues

A subset of reasons originate from the behavioral economics literature and focus on, among others, impatience, commitment, and psychological barriers. Bertrand, Mullainathan, and Shafir (2001) summarize some of the relevant propositions, including the role of minor situational details called *channel factors*; loss aversion and the consequent preference for the status quo (or the endowment effects); and compartmentalized wealth and spending.[5] They also argue reasonably that these effects can be more significant for the poor in light of the rather small manoeuvre room that they have.

[4] The recent work on identity in economics aims to provide theoretical underpinnings for these phenomena. See Akerlof (1997); Akerlof and Kranton (2000, 2002); and Fang and Loury (2005).

[5] Many real life examples fit into this. The experiment by Ashraf, Karlan, and Yin (2004) shows exactly this. In addition the ROSCAs (Rotating Savings and Credit Associations) (Iqub in Ethiopia) can be seen as such a commitment device.

The present study adopts a perspective akin to both sets of explanations in that it attempts to blend external constraints that the poor face with the potential effect these constraints may have on the internal logic governing choices by these people.[6] The argument can be informally stated in the following way. Decision making by individuals crucially relies on the set of beliefs and perceptions (or mental models) they have regarding their physical and social environment—a set that evolves with learning through experience and reflects motivation and information.

More specifically, poverty may lead individuals to construct mental models that uniquely diminish the significance of some features of the environment and magnify others. If an individual believes that he/she has little, if any, ability to impact on his/her wellbeing, then he/she would have inadequate incentives to become informed about or explore pathways into better wellbeing. Moreover, he/she would have little motivation to allocate resources (including cognitive ones) to modify his/her beliefs and perceptions.[7] As a consequence, the set of beliefs about his/her inability to bring about positive change would be perpetuated. Thus, information, credit, insurance, or other resources/opportunities may be available (albeit with some cost), they remain unexploited by the agent because he/she is convinced that his/her actions will not make a difference.

Perspectives from Beliefs

In the psychological literature, these beliefs are akin to the concept of *locus of control* (Rotter 1966). This concept refers to an individual's perception or belief about the underlying main causes of events in his/her life: does he/she believe that his/her life outcomes are controlled by himself/herself (internal locus of control) or by external forces, such as powerful others, fate, or luck (external locus of control). Fatalism could then be an expression of an external locus of control. Indeed, the dictionary definition of fatalism is "the doctrine that all things are determined or arbitrarily decreed by fate."[8] There is plenty of work in developed economies to show that the locus of control matters for job performance (Judge and Bono 2001), and most relevantly, for schooling decisions, employment, and occupational choice (Heckman, Stixrud, and Urzua 2006). In general, the locus of control predicts economic success in both the short and long run (Judge and Hurst 2007). There is also a close link between internal locus of control and subjective life satisfaction and well-being (Peterson 2003).

Another and related link in the psychological literature is with the concept of self-efficacy (Bandura (1977)). Locus of control concerns general beliefs about control across situations, while self-efficacy concerns beliefs in one's capability to act so as to achieve desired outcomes: one's ability to cope, perform, and be successful (Judge and Bono (2001)). For example, a musician may believe that much daily practice would result in an improved performance but not believe that he or she is capable of practicing that hard.

In economics, with inspiration from anthropology and psychology, this perspective also affords an alternative characterisation of what appears to be fatalism, namely, aspirations failure (Appadurai (2001), Ray (2006)). In psychology, aspirations can be understood as the presence of forward-looking goals or targets, and a preference to attain them (Locke and Latham 2002). Accordingly, a weak capacity to aspire can translate into low or no investments and that may pass for fatalism. This weak capacity to aspire could stem from an external locus of control (linked to beliefs that one's efforts are not *likely* to lead to anything) or from low self-efficacy (beliefs that one is not *capable* of achieving much).

The psychological literature, building on control theory (Lord and Hanges 1987), suggests that performance below expectations may lead to lowering aspirations (Judge and Bono 2001). Skinner, Zimmer-Gembeck, and Connell (1998) suggest that self-efficacy is strongly influenced by the home

[6] This perspective is in line with that developed in Banerjee, Benabou, and Mookherjee (2006). See particularly, Part III of that book.

[7] Here motivation is defined as "Activation to action. Level of motivation is reflected in choice of courses of action, and in the intensity and persistence of effort" (Bandura 1994).

[8] Oxford English Dictionary, Second Edition (1989), accessed at http://dictionary.oed.com/.

environment during childhood. Krishnan and Krutikova (2010) similarly find close links between parental self-efficacy and aspirations and those of their children as adolescents.

In most recent economic research on aspirations, the emphasis has been on the process of acquiring aspirations, emphasizing social processes. Inspiration comes from Appadurai (2001), who emphasized how social mobilization can lead to exchanges of ideas and experiences on future-oriented activities, raising aspirations. In the theoretical construct by Ray (2006), peer-group comparisons of achievements and attitudes feed aspirations. Macours and Vakis (2009) focus on how aspirations, broadly defined as attitudes toward the future, are formed via social interactions, using data from Mexico.

In this paper, we explore the role of fatalism in determining well-being and future-oriented activities. We use the aspirations perspective and elements of locus of control and self-efficacy and their links to observed behaviors in rural Ethiopia. In particular, we use recently collected data from rural Ethiopia to examine whether we can uncover basic correlations predicted by the aspiration failure framework. Based on evidence that it is so, we conclude with some of the empirical challenges to further test these models.

The rest of the paper is organized as follows. Section 3 outlines more extensively the conceptual framework adopted, focusing on fatalism as aspirations failure, highlighting some of the key elements to understand its origins and correlates. The findings of our empirical analyses conducted using data collected from a survey are reported in Sections 4 and 5. The final section describes the way forward.

3. FATALISM, ASPIRATIONS, FAILURE, AND SELF-EFFICACY

A dictionary definition of the word *aspiration* is "a desire or ambition to achieve something."[9] The word thus signifies some aim or target and a preference or wish to attain it. The meaning also suggests, rather implicitly, that some effort must be exerted to realize the desired aim or target. Thus, aspirations have two distinctive aspects. First, they are *future-oriented*; that is, they are goals that can only be satisfied at some future time. Aspirations are not about immediate gratification. For example, a hungry person may aim to get some food to satisfy his immediate hunger and exert some effort to achieve that aim. This does not count as an aspiration. In contrast, the goal to be food secure in the future represents an aspiration. Note also that holding a certain aspiration may generate some satisfaction in itself. This, however, is different from the aspiration held. Second, aspirations are motivators; that is, they are goals in which individuals are willing, in principle, to invest time, effort, or money to attain (in contrast to idle daydreams and wishes). Nevertheless, the willingness to invest is potential or conditional.

In short, aspirations combine or summarize the preferences held, the expectations and beliefs formed, and the constraints acknowledged by an individual with respect to the future. Viewed as such, the broad concept of fatalism, as a failure of aspirations and self-efficacy, is not new to economics.

Perhaps the most familiar variant relates to the concept of *satisficing* that Herbert Simon initially elaborated fifty years ago.[10] Simon argues that the complex environment that economic agents function in and their limited cognitive and information-processing capabilities make full rationality beyond their reach. Instead, he characterizes decision-making by such agents as a search for alternatives that meet or exceed specified criteria or aspiration levels – a process that does not necessarily lead to the choice of a unique or best alternative. In other words, economic agents engage in satisficing rather than optimizing.

Moreover, these aspiration levels are modified depending on circumstances – a process referred to as *aspiration adaptation*. In fact, Selten (1999) argues that the three central elements of Simon's original view of bounded rationality are the search for alternatives, satisficing, and aspiration adaptation. Indeed, the aspiration adaptation theory summarized in Selten (1999), may provide an ingredient to a model of the dynamics of aspirations. However, little explicit consideration seems to be given to how aspirations are formed. As put by Selten (1999) himself:

Decision makers do not always know what they want. In new situations goals must be formed. Where does the aspiration scheme come from? Often only a finite number of decision alternatives is considered, even if in principle infinitely many are available. How is this selection made? If quantitative or qualitative expectations about goal variables need to be formed, how is this done? Aspiration adaptation theory leaves processes of goal formation, construction of alternatives, and expectation formation largely unmodelled (Selten (1999, 13)).

In psychology, social cognitive theory (building on social learning theories, Miller and Dollard, (1941)) posits that goals and aspirations come about from self-efficacy: for example, self-efficacy regulates students' aspirations, motivation, and, in the end, achievements (Bandura (1993)). In this framework, self-efficacy stems from at least four sources: mastery experiences (learning from success and failure), vicarious experiences (learning from social models), social persuasion (responding to encouragement), and emotional strength (stamina or raising ability to respond to stress). Many proponents of this theory, not least Bandura himself, explicitly identify vicarious experiences as the route to self-efficacy, raised aspirations, and success.

The […] way of creating and strengthening self-beliefs of efficacy is through the vicarious experiences provided by social models. Seeing people similar to oneself succeed by sustained effort raises observers' beliefs that they too possess the capabilities to master comparable activities required to succeed. By the same token, observing others fail despite high effort lowers observers' judgments of their own efficacy and undermines their efforts. (Bandura (1994))

[9] Oxford English Dictionary, Second Edition 1989, accessed at http://dictionary.oed.com/.
[10] See, for instance, Simon (1977) and Selten (1999).

The emphasis is on learning from social role models, but also on the importance that the peers are relevant and sufficiently similar to emulate: this is not simply "social learning" but requires role models that are similar. To quote Bandura (1994),

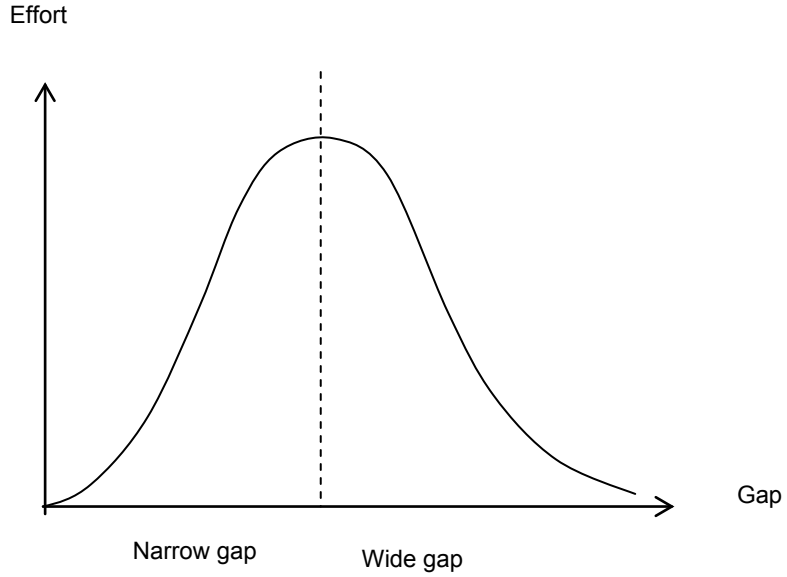
> "The impact of modeling on perceived self-efficacy is strongly influenced by perceived similarity to the models. The greater the assumed similarity, the more persuasive are the models' successes and failures. If people see the models as very different from themselves, their perceived self-efficacy is not much influenced by the model's behavior and the results it produces. Modeling influences do more than provide a social standard against which to judge one's own capabilities. People seek proficient models who possess the competencies to which they aspire. Through their behavior and expressed ways of thinking, competent models transmit knowledge and teach observers effective skills and strategies for managing environmental demands. Acquisition of better means raises perceived self-efficacy. Seeing people similar to oneself succeed by sustained effort raises observers' beliefs that they too possess the capabilities to master comparable activities required to succeed (Bandura (1994))."

The issue of aspirations and their significance, in versions with parallels in social cognitive theory, has found expression in the framework outlined by Ray (2006),[11] who attempts to characterize aspirations as well as the process of their formation. Three concepts are central to that framework—an aspiration window, aspiration gap, and aspiration failure. Aspirations reflect an individual's cognitive world, his or her zone of similar, attainable individuals, labeled by Ray (2006) as that individual's aspiration window. This aspiration window is determined by the individual's observations of his or her peers to form comparisons, as well as of the information and economic opportunities of the local environment.

Ray (2006) argues that one additional concept is required before the link between aspirations and individual behavior can be established. This he refers to as the *aspiration gap* – the difference between a person's contemporaneous 'standard of living' and the 'standard of living' to which he or she aspires. It is this gap, not aspirations as such, that conditions future-regarding behavior. The behavioral response of individuals to their respective aspiration gaps may take the form of an aspiration failure. Aspiration failure occurs as a lack of pro-active behavior (or underinvestment, in explicitly economic terms) toward filling the aspiration gap. Given that deliberate action would be costly, it is reasonable to expect very small and very large aspiration gaps to induce little or no effort to fill them - the former because the gain is too small to be worth the effort and the latter because closing the gap seems impossible. Ordinarily, it is not only necessary that individuals have aspirations, but also that they have the kind of aspirations that are feasible and rewarding to act upon.

[11] The next three paragraphs are essentially a synoptic summary of sections 2-3 in Ray (2002, 2006). See Ray (2002, 2006) for further details.

Figure 3.1—Aspiration gap and effort



Source: Authors' rendering based on the ideas in Ray (2006).

The importance of the aspirations stems from the pattern of their distribution in society and the attendant consequences. In this regard, summarizing Appadurai (2001), Ray (2006) emphasizes that, being a socially determined capacity, aspirations are not evenly distributed between rich and poor. Furthermore, this uneven distribution has intrinsic as well as instrumental consequences. The intrinsic consequence is that the *terms of recognition* are adversely tilted against the poor, stripping them of voice and dignity. The instrumental consequence is that the poor thereby lack "the (aspirational) resources to contest and alter the conditions of their own poverty." Note that this does not mean the poor have no capacity to aspire, rather it means that their opportunity to explore the linkages among means and ends is much more limited than those who are more affluent; in Ray's terms, their aspiration windows are narrow. As a result, they have a more restricted and weaker capacity to aspire (Appadurai 2001; Harriss 2005). As put by Appadurai (2001),

The capacity to aspire is thus a navigational capacity. The more privileged in any society simply have used the map of its norms to explore the future more frequently, more realistically and share this knowledge with one another more routinely than their poorer and weaker neighbors. The poorer members, precisely because of their lack of opportunity to practice the use of this navigational capacity (in turn because their situations permit fewer experiments and less easy archiving of alternative futures), have a more brittle horizon of aspirations.

This difference should not be misunderstood. I am not saying that the poor cannot wish, want, need, plan, or aspire. But part of poverty is a diminishing of the circumstances in which these practices occur. If the map of aspirations (continuing the navigational metaphor) is seen to consist of a dense combination of nodes and pathways, relative poverty means a smaller number of aspirational nodes and thinner, weaker sense of the pathways from concrete wants to intermediate contexts to general norms and back again. Where these pathways do exist for the poor, they are likely to be more rigid, less supple and less strategically valuable, not because of any cognitive deficit on the part of the poor but because the capacity to aspire, like any complex cultural capacity, thrives and survives on practice, repetition, exploration, conjecture, and refutation. Where the opportunities for such conjecture and refutation in regard to the future are limited (and this may well be one way to define poverty), it follows that the capacity itself remains relatively less developed.

Viewed in this light, aspirations become a valuable analytical device and a critical entry point for policy relevant to poverty reduction and ultimate socioeconomic transformation: the poor may have a narrow aspiration window, which may lead to either a very narrow or a wide aspiration gap and subsequently to aspiration failure. The ultimate consequence of this chain is the perpetuation of poverty.[12] More specifically, aspirations can help answer why entrepreneurship appears to be limited, both in spread and dynamism, in poor countries and thus help identify what avenues are open to stimulate greater frequency and depth of entrepreneurial activity in such countries.

The capacity to aspire, in turn, is a cultural capacity that relates to the manner in which people visualize the future and engage in forward-looking behavior (Appadurai 2001; Rao and Walton 2002). Being a cultural capacity identifiable with individuals, the capacity to aspire not only captures group-level characteristics, but also allows for the possibility of each individual breaking out (exhibit deviant behavior). Thus, the concept provides a useful handle on the individual–group symbiosis that seems to be a key to economic growth and socioeconomic transformation. It is reasonable to posit that present-day rich countries were once poor by today's standards. It is also reasonable to assume that they achieved transformation through a process that combines individual initiative, effort, and growing collective opportunities (and/or weakening resistance to change), working in a positive feedback loop.

While rooted in very different disciplinary and conceptual frameworks, there are striking common elements between social cognitive theory, with its emphasis on self-efficacy, and the aspirations failure perspective in economics. In particular, they both consider goals and aspirations important in determining success. They both emphasize the role of social comparisons and learning from peers but in ways that go beyond simple social learning (which underscores that *information* is the main constraint and that this can be learned from peers): they agree that just observing aspirations and success and failure of peers is not enough. They both stress that just having aspirations is not enough to produce success. Social cognitive theory put emphasis on the role of mental (cognitive) models that allow people to act on information acquired from others: self-efficacy which encompasses an internal locus of control (the belief that success is not fundamentally determined by fate or luck) with the capability to act to achieve aspirations. Information acquired from relevant peers (social models) can boost self-efficacy. Bandura (1994) stresses the importance of the similarity of the social models, so that they are 'competent' models that allow a person to act on the information acquired. Aspirations failure in poor settings, as denoted by a limited effort to achieve better goals and outcomes in relation to where a person is now, is consistent with both an external locus of control (the belief that fate, luck, or powerful forces determine outcomes) or low self-efficacy (the belief that one lacks the capability to achieve) or both.

Consistent with social cognitive theory, people become aware of aspiration gaps in part from observing social comparisons. Both social cognitive theory and social comparisons emphasize the importance of learning from *relevant* social models and peers to lead to success or at least to action to foster a higher standard of living. In particular, only specific aspiration gaps lead to higher aspirations and actions to achieve success. If the gap is too small, it will not lead to action and effort for improvement in outcomes – or to put it in the context of social cognitive theory, the social model is relevant but not much is to be learned from it, so self-efficacy is not increased. If the gap is too large, it will also not lead to higher aspirations and success: the social models are not *competent* (or relevant) to learn from and raise self-efficacy. In short, while by no means equivalent (they are not), there are considerable parallels in terms of the empirical predictions of these theories. In any case, they are both worthwhile to explore in empirical analysis.

[12] It is possible to view the "development as self-discovery" characterization (of Hausmann and Rodrik 2003) at the individual or the community level from this perspective.

4. DATA AND MEASUREMENT

In January 2007, an opportunity arose to add a module to a rural household survey being implemented in poor areas of Ethiopia targeted by the national-level Productive Safety Net Program (PSNP).[13] The survey sample covered approximately 24 households per *Kebele* in 54 *Kebeles* of 9 *Woredas* chosen (a total of 1,192 households) because they broadly represent the various physical and human (or livelihood) conditions in Ethiopia.[14] For each household, demographic, health, education, income, consumption, and expenditure information were collected.[15]

A number of variables that shed light on people's locus of control, aspirations, and self-efficacy and the consequences for future-oriented behavior were also collected. In this section, we introduce these variables and their links. Measuring people's goals and ambitions is not an easy task; in line with our discussion in the previous section, it will also not provide the appropriate perspective. Aspirations are not only the wants and preferences of individuals, their beliefs and calculations regarding the feasibility of those wants and preferences critically matter for behavior, as well. In view of the links with concepts such as locus of control and self-efficacy, we focus on simple sets of questions. Typically these questions are used in work aimed at establishing the locus of control, going back to Rotter (1966), and they are also usually a core subset in the assessment of self-efficacy. In particular, we asked:

For each of the following, please tell me which of the two propositions you most agree with

a. 1. "Each person is primarily responsible for his/her success or failure in life."
   2. "One's success or failure in life is a matter of his/her destiny."

b. 1. "To be successful, above all one needs to work very hard."
   2. "To be successful, above all one needs to be lucky."

Consistent with our framing related to fatalism, both questions contrast success through own effort with success through luck and fate. Note that in the measurement of locus of control, more elaborate and arguably more careful instruments have been proposed (for example, Levenson 1981). However, for our purposes, the questions above appeared to be simple enough, given the poor rural setting, while providing helpful insights.

The resulting binary responses are deemed informative about the extent to which individuals feel in control of their own future. Overall, in the present sample, 31 percent of the respondents agreed that "One's success or failure in life is a matter of his/her destiny," while 32 percent believed that "To be successful, above all one needs to be lucky." Indeed, the responses to these questions are quite consistent with each other: 82 percent of those who agreed with the statement that "One's success or failure in life is a matter of his/her destiny" also agreed with the statement that "To be successful, above all one needs to be lucky."[16] Given the obvious links with fatalism, only the results obtained using the destiny-related indicator are reported in subsequent paragraphs.[17] We use this indicator in the analysis below as a crude gauge of people's self-efficacy and aspirations in this setting.

As a first step, we explore whether answers to this question were broadly consistent with other characteristics with which we could reasonably expect them to correlate. Poverty is one obvious example: in very poor settings, it is likely that many of the poor would also display a limited sense of

[13] The survey was conducted for the study titled "Ethiopia – the Path to Self-Resiliency" – a study coordinated by CHF–Partners in Rural Development and led by the consultancy Technical Assistance to Nongovernmental Organizations (TANGO).

[14] *Kebeles* are the lowest level of government administration in Ethiopia. Several *Kebeles* form a *Woreda* which is equivalent to a district or a county.

[15] The aspirations-related module was itself administered to two adults per household. For ease of interpretation however, and because certain of the covariates used were only available at the household-level, only household heads are kept in the sample used. Note, though, that all estimations were also performed at the individual-level with equivalent – in fact, sometimes stronger – results.

[16] A more striking result is that 44 percent of the sample identifies destiny (question 'a') **or** luck (question 'b') as the determinants of well-being outcomes.

[17] Note however that all the tests reported were also performed using the luck-related indicator and that comparable results were obtained.

ability to control their destiny. As a first consistency test, we relate this indicator to a measure of self-assessed wealth and poverty, controlling for age, gender, and literacy status of the respondent, as well as village-level characteristics. The self-assessed poverty indicator is captured via the following question: [18]

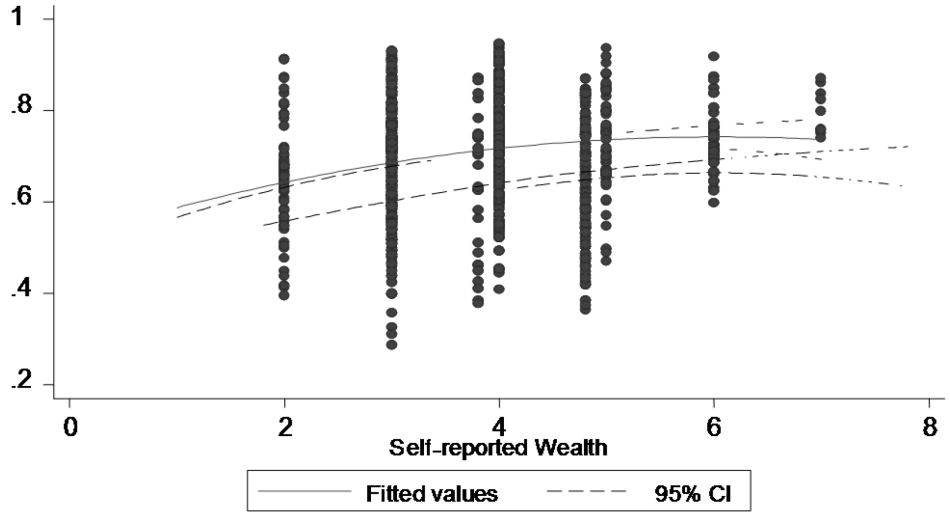
Just thinking about your own household circumstances, would you describe your household as: (i) Destitute, (ii) Poor, (iii) Never have quite enough, (iv) Can manage to get by, (v) Comfortable, (vi) Rich, (vii) Very rich.

While 90 percent of the answers fell within the first four categories (recall that the sample was explicitly selected from among the poorest districts in Ethiopia), the distribution nevertheless offers enough variations to investigate its relationship with the aspiration indicator described above. We do this using a logit model, and the results are reported in Figure 4.1, in which on the X-axis, 1 signifies the lowest category of perceived wealth ("destitute") and 7 is "very rich"; the Y-axis gives the predicted probability of having an internal locus of control.[19] As expected, the figure displays a positive relationship between perceived wealth and internal locus of control, although with significant heterogeneity in the predicted probability of having an internal locus of control at each wealth category. Note that the result does not tell us anything about causality between locus of control and wealth; theory would in any case suggest mutually reinforcing processes. Below we will use responses to the destiny question for further analysis.

Role Models and the Aspiration Window

According to the discussion in Sections 2 and 3, a person's aspirations and self-efficacy are affected by comparisons formed by observing peers, as well as by the information and economic opportunities available in the local environment. Accordingly, poorer households are expected to have lower aspirations and self-efficacy because they observe from narrower windows.

Figure 4.1—Locus of control and poverty



Source: Authors' computations from data collected by the Path to Self-resiliency Survey, 2007.
Notes: Predicted probability are based on a logit estimation with dependent variable the respondent's aspirations (proxied by the respondent's belief in destiny or personal responsibility as the determinant of a person's lot), and independent variables age (linearly and squared), gender, literacy status, per capita monthly expenditures and *Kebele*-level fixed effects. The 95 percent confidence interval is bounded by the two broken lines.

[18] By using a self-assessed wealth indicator, we may well capture a broad definition of poverty, beyond current material welfare.

[19] The regression itself is reported in Table A.1 of the Appendix. Note that "internal locus of control" refers to agreement with Item 1 in the destiny-related indicator; that is, "Each person is primarily responsible for his/her success or failure in life."

The data used here give a relatively strong support to this hypothesis. For instance, for 89 percent of the respondents their "role model" lives in the same *Kebele* (although there is no close family link between the two individuals). Indeed, several relatively successful individuals are likely to be found in each *Kebele*. As put by respondents to an interview in Holte *Kebele*, "We have successful individuals who are a model for others in their activities to improve their food security status." Nevertheless, the fact that the vast majority of the respondents' role models are their more or less immediate neighbors indicates a rather limited access to outside information.

The respondents' limited exposure to the rest of the world is further reflected in the fact that 92 percent of all the household heads in the sample were born in the *Kebele* where they now live, and more than 70 percent of responding household heads declared that both their first language and their religion is the same as that of the successful person or role model they have chosen.[20] In addition, while 57 percent of the respondents reported listening to the radio less than once a year, 33 percent did not have regular contact with at least one person outside of their *Kebele*, and 56 percent did not have such contacts with individuals outside their *Woreda*.

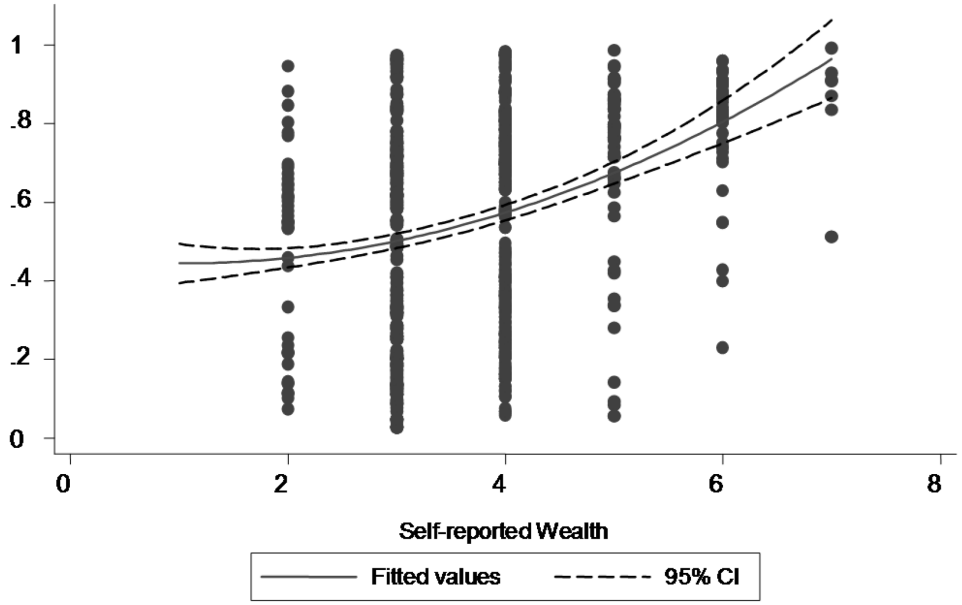
Our data also suggest that poorer people have little exposure to potential role models from outside the *Kebele*, potentially contributing to lower aspirations and self-efficacy. In Figure 4.2, we report estimates similar to those in Figure 4.1, only this time we assess the probability that respondents may have regular contacts outside their *Woredas* as a function of their self-assessed poverty status, again using a logit model in which the dependent variable is whether the respondent ever talks with individuals outside his or her district, and as independent variables, besides self-reported wealth, age of the respondent and squared age, gender, literacy status, and *Kebele* fixed effects, that is, dummy variables controlling for each *Kebele*.[21] Here also, the results tend to support the idea of narrower windows for poorer individuals.

In line with our framework above, locus of control appears to be correlated to these indicators of the *window* made up of potential role models. Table 4.1 reports simple tests of difference. At this stage, again these results may not be interpreted as causality. For instance, one's window can itself be the result of a higher aspiration/internal locus of control individual's choice to seek more information, or of a third factor (or set of factors) influencing both one's window and locus of control. Nevertheless, they do suggest that larger windows are linked to an internal locus of control.

[20] The fractions are even higher for speakers of specific languages (almost 100 percent for Afar, Oromiffaa, and Tigrigna speakers) and followers of specific religions (above 90 percent for Orthodox Christians). The exceptions are Siltie speakers and Protestants.

[21] The regression itself is reported in Appendix, Table A.1.

Figure 4.2—Aspiration window (contact with peers outside community) and poverty



Source: Authors' computations from data collected by the Path to Self-resiliency Survey, 2007.
Notes: Predicted probability are based on a logit estimation with dependent variable 'the respondent ever talks with individuals outside his/her *Woreda*', and independent variables age (linearly and squared), gender, literacy status, per capita monthly expenditures and *Kebele*-level fixed effects. The 95 percent confidence interval is bounded by the two broken lines.

Indicators of Aspiration Gap and Self-Efficacy

The desire to capture the distance between what is aspired to and what the current state is underlies the idea of the aspiration gap. According to the theory above, it is this gap that determines the level of effort exerted by individuals to better their future. It is important to note, as shown in Figure 3.1, the same level of effort can be required for narrow and wide aspiration gaps.

Several, albeit partial, indicators can be used to characterize the aspiration gap. First, we note that 73 percent of the respondents believe that they could become as successful as their respective role model within five years. These results overall suggest that, for most respondents, the distance between aspired and current states is not perceived to be very wide. This is further supported by the respondents' low desire for change. Indeed, only 45 percent of them were ready to change their main income-earning activity (predominantly farming), and only 28 percent were willing to move somewhere else, even when this would lead to an improved standard of living (keeping in mind that all respondents were sampled from districts considered among the most deprived areas of Ethiopia). Overall, these results indicate a narrow aspiration gap for most.

Table 4.1—Locus of control, peers, and aspiration windows

Question	(1) Total	(2) Internal locus of control (own effort)	(3) External locus of control (destiny and fate)	Difference (2)-(3) (p-value)
Communicate regularly with at least one person outside the *Kebele*? (%)	66.5	68.0	63.3	0.14
Communicate regularly with at least one person outside the *Woreda*? (%)	44.2	46.4	39.6	0.05
Listen to radio more than once a year (%)	57.3	61.7	47.2	0.00
Role model lives in same *Kebele* (%)	88.6	88.8	88.0	0.68

Source: Authors' computations from data collected by the Path to Self-resiliency Survey, 2007.

In Table 4.2, we assess the relationship between these indicators and locus of control. Despite there being evidence of low aspiration gaps in general, the gaps are significantly wider for individuals with external locus of control compared to those with internal locus of control. The former also reveal less appetite for change. A tentative inference and a hypothesis can be derived from these. First, the wider aspiration gaps of those with an external locus of control indicate they are more likely to believe that their self-efficacy is limited. Second, in rural Ethiopia, highly restricted aspiration windows may lead to narrow aspiration gaps for individuals with internal locus of control, while wide aspiration gaps may be the consequence for individuals with external locus of control. Further work on this hypothesis appears warranted.

Table 4.2—Aspiration gap and locus of control

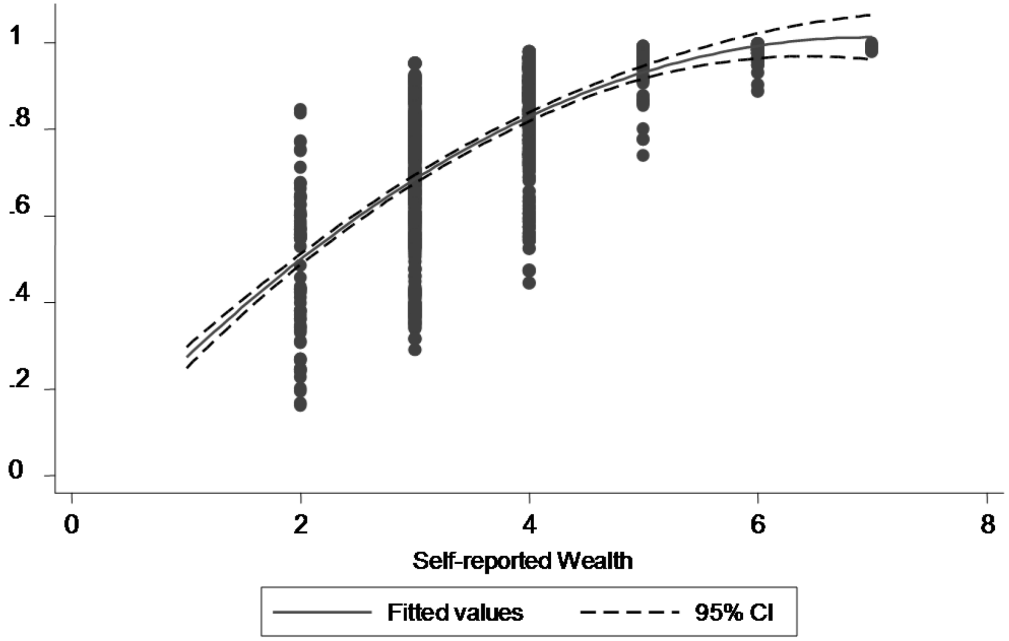
Indicator	(1) Total	(2) Internal locus of control (own effort)	(3) External locus of control (destiny and fate)	Difference (2)-(3) (p-value)
1. Can become as successful as role model within five years	72.8	75.2	66.8	0.00
2. Would like to change main income earning activity	45.5	47.7	40.5	0.02
3. Is willing to move to improve standard of living	28.0	29.9	23.9	0.03
4. Is happy or very happy (instead of unhappy or very unhappy)	71.3	74.7	63.9	0.00

Source: Authors' computations from data collected by the Path to Self-resiliency Survey, 2007.

In Table 4.2, also reports on a link between an internal locus of control and happiness. It is rather striking that more than 70 percent of the respondents indicated that they were either happy or very happy, while less than 30 percent said otherwise. Despite widespread poverty, such levels of *happiness* have been observed in many developing countries (see Duflo and Banerjee 2005). Consistent with other findings in the literature of richer economies, we find nevertheless that an internal locus of control and happiness is significantly related (Peterson 2003). Figure 4.3 suggests a reason why these findings should not come as a surprise: in these data happiness is very strongly related to concepts of self-perceived

wealth and poverty, which has already been correlated with locus of control.[22] This figure is again based on a logit model with controls, using being *happy* or *very happy* as the dependent variable.[23]

Figure 4.3—Happiness and poverty



Source: Authors' computations from data collected by the Path to Self-resiliency Survey, 2007.

Notes: Predicted probability are based on a logit estimation with dependent variable 'the respondent is happy or very happy', and independent variables age (linearly and squared), gender, literacy status, and *Kebele*-level fixed effects. The 95 percent confidence interval is bounded by the two broken lines.

[22] The regression itself is reported in the Appendix.

[23] A large body of research spanning both developed and developing countries (Di Tella, MacCulloch, and Oswald 2002; Layard 2005; Graham, Eggers, and Sukhtankar 2004; and Stutzer 2002) has studied the links between happiness and wealth. The link in Figure 4.3 appears stronger than in many of the other studies.

5. ASPIRATION, FAILURES AND FUTURE-ORIENTED BEHAVIOR

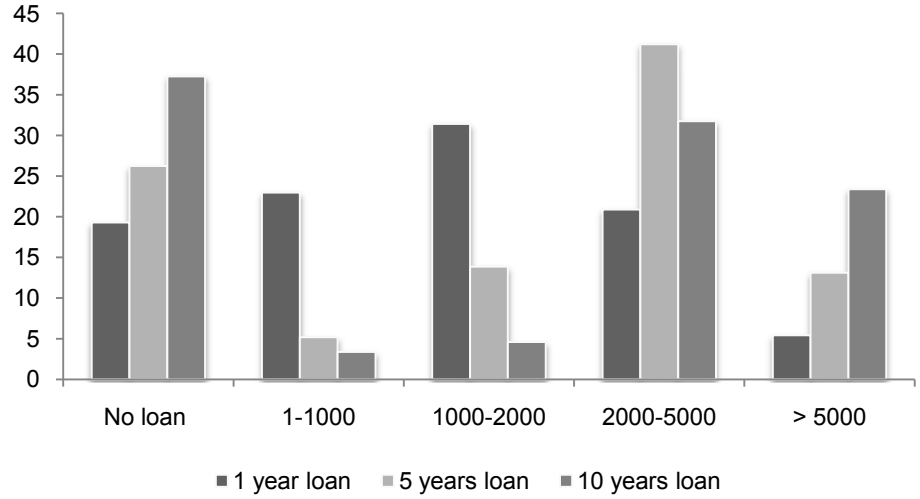
Building on aspirations failure theories, the hypothesis enunciated in section 4 states that narrow aspiration windows engender very narrow or very wide aspiration gaps and ultimately lead to aspirations failure, in the form of limited effort toward future-oriented behavior to improve living standards. External locus of control and low self-efficacy, possibly linked to limited access to *competent* social models, would similarly predict limited action to improve one's lot. Narrow aspiration gaps appear to characterize the sample used. In this section, we consider this further. In particular, we explore whether there is a link between forward-looking behavior, in this case demand for credit, and measured locus of control. Respondents were asked a set of questions regarding credit, as seeking credit is by definition future-oriented behavior:

Q 21. A banker came to you and offered to lend you any amount of money you ask…[24]

a. 1. How much would you ask for if the loan was payable in 1 year?
   2. What would you use this money for?
b. 1. How much would you ask for if the loan was payable in 5 years?
   2. What would you use this money for?
c. 1. How much would you ask for if the loan was payable in 10 years?
   2. What would you use this money for?

Figure 5.1 presents the distribution of answers to the first part of each question. Note that the amounts that would be borrowed remain relatively small, even for a 10-year repayment period (as a rule of thumb, one US dollar is roughly equal to 10 birr at the time of the survey). These amounts, however, increase with the length of the repayment period.[25] It is notable that a large proportion of individuals (17 percent) are not interested in taking any loans,[26] and this lack of interest increases as the time horizon expands, suggesting a fear of commitment probably due to uncertainties about future economic status.

Figure 5.1—Demand for credit, by length of repayment period



Source: Authors' computations from data collected by the Path to Self-resiliency Survey, 2007.
Notes: The bars indicate the percentage of respondents (vertical axis) willing to borrow the amounts specified (horizontal axis) and the repayment periods specified (legend)

[24] This formulation of the credit demand question was intended to make credit market imperfections in principle inoperative.
[25] This is consistent with the finding that loan size is quite responsive to changes in loan maturity. See Karlan and Zinman 2005.
[26] This is even more striking since the hypothetical scenario would likely encourage respondents to overstate their willingness to borrow.

In Table 5.1, the average loan amounts (in Birr) demanded are linked to the respondents' locus of control. The results are rather clear, showing that people would borrow significantly more if they felt in control of their lives. Those with internal locus of control are significantly more willing to take a loan for both 1-year and 10-year maturity periods.

Table 5.1—Loan repayment period and locus of control

Loan period	(1) Total	(2) Internal locus of control (own effort)	(3) External locus of control (destiny and fate)	Difference (2)-(3) (p-value)
Amount borrowed for 1 year	2,055	2,131	1,883	0.07
Amount borrowed for 5 years	3,051	3,074	3,001	0.67
Amount borrowed for 10 years	3,561	3,699	3,248	0.03

Source: Authors' computations from data collected by the Path to Self-resiliency Survey, 2007.

The types of investments respondents would make if they were lent the money were considered next. To this end, answers are classified into three categories. The first category groups all short-term uses such as expenditure on immediate food consumption and household consumables. The second category groups what are identified as medium-term investments; specifically, investments aimed at enhancing the respondents' capacity within their present activities are included. Purchases of farm implements of all kinds and oxen and other cattle fall into this category. Finally, the third category captures investments that are meant to help people break out of their current socioeconomic status. Such investments encompass education (including respondents' own education or that of their children) or funds to start a new business. The question considered then is whether fatalistic individuals (with external locus of control) are more likely to invest in shorter-term activities than their less fatalistic counterparts. The results are relatively clear: very few individuals would spend loans on immediate consumption in both cases, although those with internal locus of control would invest significantly more often in long-term activities (Table 5.2).

Table 5.2—Use of hypothetical loans by locus of control

Use of hypothetical loan	(1) Total	(2) Internal locus of control (own effort)	(3) External locus of control (destiny and fate)
Short-term investment (immediate consumption)	3.95	3.79	4.37
Medium-term investment (farm implements, oxen)	42.82	40.44	48.81
Long-term investment (education, new business)	53.22	55.77	46.93

Source: Authors' computations from data collected by the Path to Self-resiliency Survey, 2007.
Note: Person Chi-square(2) = 5.8039, Probability = 0.05

As a further step toward a more rigorous testing strategy, determinants of the amounts respondents would borrow if they were offered a loan were investigated econometrically. Using the same control variables as before (age, age squared, gender, literacy, self-reported wealth,[27] and *Kebele*-level fixed effects), we explored whether the measured destiny indicator (locus of control) helps explain

[27] Self-reported wealth is used in this regression as a continuous variable, taking on seven values, increasing in wealth. Alternative specifications, in which the underlying categorical variable is transformed in dummy variables, did not change the findings.

borrowing intentions. Recall Figure 5.1 shows that a number of individuals indicated that they would rather not take a loan if it were offered to them. A Tobit estimator is used to account for this censoring of the data.[28] The estimation was run for each of the three proposed repayment periods: 1 year, 5 years, and 10 years. The marginal effects, calculated at the means of the independent variables, are reported in Table 5.3.

Table 5.3—Determinats of loan demand - marginal effects

	One-year loan			Five-year loan			Ten-year loan		
Variable	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**
No fatalism =1 (0/1)	337.28	267.81	227.34	184.32	73.80	54.59	534.80	432.54	471.91
(internal locus control)	(2.73)	(2.18)	(1.96)	(1.05)	(0.42)	(0.32)	(2.35)	(1.90)	(2.14)
	***	**	**				**	*	**
Woman=1 (0/1)	-491.17	-659.41		-456.10		-606.20		-5.53	-288.20
		(3.16)	(4.51)		(2.05)	(2.75)		(0.02)	(0.99)
		***	***		**	***			
Age		-6.30	-4.04		45.90	60.56		73.18	96.24
		(0.26)	(0.18)		(1.32)	(1.78)		(1.59)	(2.14)
						*			**
Age^2		-0.003	-0.02		-0.69	-0.81		-1.08	-1.27
		(0.01)	(0.09)		(1.91)	(2.29)		(2.24)	(2.71)
					*	**		**	***
Schooling (0/1)		641.60	147.86		558.88	7.57		5.82	-435.44
		(4.59)	(1.15)		(2.92)	(0.41)		(0.02)	(1.79)
									*
Self-reported wealth		73.60	180.71		149.68	182.81		215.70	40.10
		(1.47)	(3.62)		(2.12)	(2.48)		(2.34)	(0.42)
			***		**	**		**	
Village-level fixed effects			Yes			Yes			Yes
Number of observations	1,192	1,192	1,191	1,192	1,192	1,191	1,192	1,192	1,191
Censored obs (at credit demand = 0)	228	228	228	311	311	311	443	443	443

Source: Authors' computations from data collected by the Path to Self-resiliency Survey, 2007.
Notes: Marginal effects reported are at the mean of independent variables.
t-statistics are in parentheses. *** = significant at 1% level, ** = significant at 5% level, * = significant at 10% level
Dependent variables: 1-year loan: mean = 2,048; standard deviation = 2,183.
5-year loan : mean = 3,041, standard deviation = 2,792
10-year loan : mean = 3,549, standard deviation = 3,492

The control variables are important, in order to allow us to rule out some other potential sources of explanation which may be correlated with locus of control. Indeed, several factors may compete in explaining one's investment behavior, including the lack of complementary assets, the exposure to income shocks, lack of information, identity traits, missing markets, and limited local investment opportunities. Within our data, we cannot control for all possible explanations, but we can control for correlates of these factors, such as wealth, schooling, gender, age, as well as local opportunities or norms, by using *Kebele*-level fixed effects. For each dependent variable, the regression without controls, with household-level controls, and finally with *Kebele*-level fixed effects are shown.

First, looking at the controls, we find some clear gender effects (reducing credit demand), some age effects (for larger sums, possibly suggesting life cycle effects) and a positive correlation for wealth, significant in some of the specifications. Wealth effects may signify less concern about indebtedness or greater access to complementary assets. Strikingly, we do find a positive link between internal locus of

[28] Individuals who responded that they would not take any loan if it were offered to them may indeed be more willing to save. As such, their answers would have been negative and the zero values observed therefore support the use of a Tobit estimator.

control (no fatalism) and credit demand, especially for smaller and larger loans. Adding more controls reduces the role of fatalism, as more variables correlated with fatalism, such as perceived wealth, are entered. The effect is significant at 5 percent for the case of 1 and 10-year loans, even when *Kebele*-level dummies are included. The size is relevant: an internal locus of control increases credit demand by 10 percent of the standard deviation in 1-year loan demand and 13 percent of a standard deviation in 10-year loan demand. In sum, an internal locus of control, implying no fatalism, appears to be linked to future-oriented actions, at least on the basis of the apparent demand for credit.

This section has provided preliminary, although robust, empirical evidence that the aspiration framework is relevant to the analysis of poverty dynamics. In particular, the results suggest that an external locus of control characterizes a large proportion of the surveyed population and may significantly influence their future-oriented behavior.

6. CONCLUSION

This paper applies the aspirations failure framework used in recent theoretical work in economics and also draws inspiration from social cognitive theory in order to study the effects of fatalism on economic behavior. Specifically, it finds that concepts such as external locus of control, low self-efficacy, and a narrow aspirations gap can be used to help understand the role of fatalism and its implications for future-oriented activities, such as borrowing. Understood in this sense, the evidence suggests that fatalism lowers the demand for long-term loans and loans for productive purposes.

Of course, the final set of tests in the paper can hardly establish a causal link between fatalism and actual behavior, in part because they are based on hypothetical scenarios. Furthermore, causality will always be difficult to establish because all of these concepts – fatalism, locus of control, self-efficacy, aspiration gaps, and aspirations failure – are all likely to interact with economic variables in a highly endogenous way. Exploring these links, preferably in an experimental setting, is the next stage of this research agenda. Such work is important because it may shed light on the potential to raise self-efficacy or widen aspirations gaps or both in ways that allow poor populations to take advantage of opportunities and to create new ones. By so doing, it can help break the vicious circle of poverty that stems from aspirations failure. Work of this nature, in the form of a field experiment, is now taking place in Ethiopia.

APPENDIX: SUPPLEMENTARY TABLE

Table A.1—Logit estimates for Figures 4.1, 4.2, and 4.3.

Variable	Locus of control	Happiness	Communicates outside *Woreda*
Age	0.076	0.030	-0.031
	(0.028)**	-0.032	0.041
Age^2	-0.001	0.000	0.000
	(0.000)**	0.000	0.000
Gender (1 = woman)	0.178	-0.482	-0.153
	-0.199	(0.223)*	-0.280
Schooling	0.287	-0.025	-0.437
	-0.172	-0.199	-0.229
Self-reported wealth	0.219	0.841	0.566
	(0.064)**	(0.084)**	(0.094)**
Village fixed effects	Yes	Yes	Yes
N	1,148	1,127	764

Source: Authors' computations from data collected by the Path to Self-resiliency Survey, 2007.

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